BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA



Order Instituting Investigation and Order to Show Cause on the Commission's Own Motion into the Operations and Practices of Pacific Gas and Electric Company with respect to Facilities Records for its Natural Gas Distribution System Pipelines.

Investigation 14-11-008 (Filed November 20, 2014)

REPLY BRIEF OF THE SAFETY AND ENFORCEMENT DIVISION

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SUMMARY OF RECOMMENDATIONS

- 1. The arguments raised in the Opening Brief of the Pacific Gas & Electric Company should be rejected.
- 2. Pacific Gas & Electric Company should be found in violation of the identified code sections, fined, and ordered to enact the remedial measures described in the Opening Brief of the Safety and Enforcement Division.

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I. INTRODUCTION

The Opening Brief of Pacific Gas and Electric Company ("PG&E") argues against PG&E being found in violation or fined based on the record of this proceeding. The Safety and Enforcement Division ("SED") disagrees with PG&E's contentions and submits that PG&E should be found in violation of the identified code sections, fined, and ordered to enact the remedial measures described in SED's Opening Brief.

II. THERE IS MINIMAL DISPUTE REGARDING THE FACTS UNDERLYING SED'S CASE

Appendix D of PG&E's Opening Brief identifies the apparent disputes that PG&E has with the underlying facts of certain incidents. PG&E characterizes the dispute as minor. PG&E's witness, Mr. Howe acknowledges that:

[W]ith some minor exceptions noted in Chapter 3 of PG&E's reply testimony, PG&E agrees with PWA's description of the six incidents identified in the OII and the other events included in the PWA Report. We also acknowledge their seriousness.¹

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¹ Exhibit 4, Chapter 1: Introduction and Policy ("Howe Testimony"), at 1-4:28-31.

PG&E's discussion of burden of proof cites *Tracfone Wireless*, which explains the burden of proof in factual terms.² Outside the margins of PG&E's quote, *Tracfone Wireless* states:

CPSD does not have the burden to refute defenses as the respondent assumes the burden of proof as to its defenses. This is the usual standard in Commission adjudicatory proceedings such as this investigation. In applying the burden of proof to the parties in this proceeding, we consider the circumstances associated with affirmative defenses and the rule that, except as otherwise provided by law, a party has the burden of proof as to *each fact the existence or nonexistence of which is essential to the claim for relief or defense* that she is asserting.³

In the instant proceeding, there is minimal dispute as to the facts underlying SED's case. PG&E's burden argument thus rests on the notion that SED's testimony, resulting from, according to PG&E, a "thorough investigation and extensive discovery", was somehow insufficient. Yet, as to the initial six incidents, the Commission has already determined that:

The SED Investigation Reports present us with a strong showing that PG&E may have violated applicable law. We infer that the state of PG&E's records regarding critical infrastructure (in this case, its gas distribution pipelines) may have been inadequate to make critically important, ongoing safety decisions. We have before us sufficient evidence and good cause to commence a formal investigation to ascertain whether such violations have occurred, and if so, to consider the proper penalties and remedies for such violations. ⁵

This is not a case of material disputed investigative facts, as PG&E's burden argument would suggest. Indeed, PG&E's main defenses focus on legal arguments,

² PG&E Opening Brief, at 8-9. PG&E's Opening Brief also omits discussion of adverse inferences regarding missing records, as well as the proceeding's characterization as an order to show cause.

³ Investigation of TracFone Wireless, Inc., 2014 Cal. PUC LEXIS 700, *24-25 (internal citations omitted) (emphasis added).

⁴ PG&E Opening Brief, at 2.

⁵ Order Instituting Investigation and Order to Show Cause, dated: November 20, 2014 ("OII"), at 7-8.

along with PG&E's interpretation of certain facts. PG&E has the burden of proof as to its defenses. In SED's view, PG&E has failed to offer any effective arguments against SED's case.

III. PG&E MISSTATES SED'S POSITION REGARDING THE SIGNIFICANCE OF THE 19 GAS DISTRIBUTION INCIDENTS

In its Opening Brief, PG&E opines:

However, SED focused only on 19 isolated incidents that occurred on 42,000 miles of distribution mains and 3.3 million services over a six-year period. SED's experts admit that no general conclusions about the safety of PG&E's gas distribution system or the quality of its recordkeeping as a whole can be drawn from such a small sampling of PG&E's operations. ⁶

In support of its argument, PG&E points to the hearing transcript from page 81, line 6, through page 82, line 14.⁷

However, the hearing transcript supports the proposition that there are some situations in which PG&E has failed to follow its procedures. PG&E's cited hearing transcript range is copied below in its entirety:

Q. Under "Major Findings" on page 2, the first bullet: Evidence for recent incidents gathered in support of this OII. That is the 19 incidents we've been talking about, right?

A. Yes.

Q. Indicate that PG&E has failed to follow the regulations and procedures regarding recordkeeping, including both maps and records. So a question, because it is not clear from your report or the rebuttal, are you offering an opinion that PG&E has failed to follow records and procedures as to those 19 incidents or are you offering an opinion that based on those 19 incidents PG&E has failed to follow record – regulations and procedures for recordkeeping in its gas distribution system generally?

⁶ PG&E Opening Brief, at 10-11 (internal citations omitted).

⁷ PG&E Opening Brief, at 11, fn. 63.

WITNESS WOOD: A. I think we are saying that based on the evidence from those 19 incidents there are at least some situations in which PG&E has failed to follow its procedures. And the question that you haven't asked – I'm sorry.

ALJ BUSHEY: You will not be answering. (Laughter.)

WITNESS WOOD: I'm getting there.

MS. FIALA: Q. I will do my best to get to that question, Mr. Wood, and maybe even a better one. My question, just to be sure that I really got that answer, you said that based on evidence PG&E, at least in some incidences, is not following regulations and procedures. Are you talking about the 19 incidents or are you –

WITNESS WOOD: A. Yes.⁸

After confirming the meaning of the cited sentence from the PWA Report, which is the undisputed fact that at least in some instances PG&E is not following regulations and procedures, PWA explained an aspect of the basis for broader concerns.

WITNESS GAWRONSKI: It was a small subset that PG&E reported to the CPUC that we reviewed. And those 19 rose to the top right away. So we concentrated on evaluating those. We didn't evaluate all of them. There could be many more. But there is at least 19 of them. That is what Paul was trying to say, at least 19 that we've identified these problems.⁹

Furthermore, PWA testifies that: "[w]eak safety culture has been an historic problem at PG&E." PWA also testifies that PG&E's "ongoing map correction activities are typically opportunistic (i.e., carried out in the normal course of maintenance) rather than proactive." PWA further testifies that: "PG&E maps and records have suffered from years of neglect, leading to a situation in which maps are

 $[\]frac{8}{2}$ RT at 81:6 – 82:14 (Vol. 1).

⁹ RT at 82:27 – 83:7 (Vol. 1).

¹⁰ Exhibit 1, PWA Report, at 75:17.

¹¹ Exhibit 1, PWA Report, at 2:1-2.

inaccurate and records are incomplete; the inaccuracy and incompleteness has contributed to numerous incidents, some serious." PWA also testifies that "PG&E's handling of the incident at Mountain View (07/30/13), a clear precursor of the incident at Carmel (03/03/14), supports the conclusion that PG&E has failed to comply with ... 'learning from experience' regulations; until an incident is sufficiently high profile that action must be taken." 13

Moreover, PWA testifies to pervasive underlying gas distribution recordkeeping procedural problems:

... PG&E and Division records management procedures inadequately detailed which records needed to be retained and maintained to demonstrate compliance with general order requirements, California Laws, and gas pipeline safety requirements. As a result an evolving set of PG&E record retention procedures focused more on *which records could be destroyed* rather than on required records and their retention requirements. 14

PWA also testifies regarding the resultant status of the records, given PG&E's failure to follow procedures.

PG&E's records retention procedures were inconsistently followed, resulting in map plats becoming outdated; containing incorrect and incomplete information. Key pipeline history records and files were lost, misplaced and/or inadvertently destroyed. Plats maps have been found to be incomplete or misleading because they do not contain up to date information on the location, nature, diameter and material of current lines. ... Some plat maps have been found to contain lines that do not exist, and exclude gas lines that do exist. 15

¹² Exhibit 1, PWA Report, at 74:6-8.

¹³ Exhibit 1, PWA Report, at 3:7-9.

¹⁴ Exhibit 1, PWA Report, at 31:30-35 (emphasis added).

¹⁵ Exhibit 1, PWA Report, at 31:36-40, 32:5.

PG&E should not be under the misimpression that only 19 incidents are concerning to SED. SED's Opening Brief exhaustively described the numerous failures with PG&E's gas distribution recordkeeping, which endanger the public. A sample of such concerns, includes, but is not limited to the following:

- The missing De Anza leak repair records from 1979-1991; 16
- The significant volume of mapping errors in PG&E's gas distribution system as demonstrated by Exhibit 31, which documents 390 mapping errors for the last six months of 2014; 17
- The tens of thousands of plastic services which have been installed without a locating wire (which, given PG&E's pervasive mapping errors, make such facilities harder to locate);
- A recent adverse trend in dig-ins as demonstrated by Exhibit 30, which notes numerous incidents of PG&E at-fault dig-ins from January 1, 2014 through June 30, 2014; ¹⁹ and
- PG&E's noncompliance regarding the maximum allowable operating pressure ("MAOP") for approximately 243 distribution systems. 20

The 19 cited incidents are a troubling sample from PG&E's broader recordkeeping problems. Citing PG&E for every error in its gas distribution recordkeeping system was not the approach taken by SED. Rather, SED's approach of using the 19 incidents as a sample is pragmatic and reasonable. Ultimately, SED's case in this matter provides the requisite basis to find PG&E in violation of applicable law, establish appropriate fines, and order remedial measures.

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¹⁶ See Exhibit 6, Attachments Supporting PG&E Reply Testimony Chapters 1-5; Volume 2 of 4 (Attachments 23-75) (Redacted), Attachment W048 ("Internal Gas Incident Review"), at W048.003.

¹⁷ Exhibit 31, Letter from S. Sharp to J. Como, E. Randolph, E. Malashenko Re: PG&E Semi-Annual Gas Distribution Pipeline Safety Report - Table 13B-1 (8/31/2015) ("Semi-annual Report").

¹⁸ Exhibit 32, Memorandum from Internal Auditing to Vice President - Gas Standards and Policies Re: Audit of Gas Damage Prevention Program, File # 12-014 (1B11-0112) (Redacted) ("2012 Audit"), at 6-7.

¹⁹ Exhibit 30, Gas CAP Notification 7005503 (Redacted) ("Adverse Trend CAP"), at 1.

²⁰ Exhibit 1, PWA Report, at 49-54.

IV. PG&E'S DIG-IN ASSESSMENT IS MISLEADING

PG&E touts its asserted 0.02% dig-in damage rate as a defense.²¹ Regarding dig-ins, PG&E states that: "PG&E correctly locates and marks 99.98% of the more than half-million locate and mark requests it receives in a typical year." Mathematically, PG&E is touting approximately 100 annual mistakes locating and marking its gas system.

PG&E's assessment of at-fault dig-in trends, omits discussion of the Adverse Trend CAP Item regarding 2014. SED presented Exhibit 30, Gas CAP Notification 7005503, at hearings. The CAP Item identified an "adverse trend in dig-ins" noting "79 incidents of PG&E at-fault dig-ins" from January 1, 2014 – June 30, 2014. Further, 21 additional events were noted subsequent to July 1, 2014. The identified causal factors were: map validation, inattention to map detail, minimal experience, did not call mapping, and adherence to procedure when a facility is difficult to locate. The identified causal factors were:

A fundamental question is the degree of risk posed by PG&E's mistakes. It does not appear that PG&E has conducted a meaningful examination of the risk that erroneous maps have contributed to at-fault dig-ins. At hearings, Mr. Thierry was cross-examined by SED on this point:

- Q. So PG&E has not conducted an assessment comparing the risk of erroneous maps to resulting in at-fault dig-ins to these other risk factors resulting in at fault dig-ins?
- A. My organization has not.
- Q. Do you have any knowledge as to whether PG&E has as an organization?
- A. I do not.

²¹ PG&E Opening Brief, at 10-13.

²² PG&E Opening Brief, at 10 (internal citation omitted).

²³ See Exhibit 30, Adverse Trend CAP.

²⁴ Exhibit 30, Adverse Trend CAP, at 1.

²⁵ Exhibit 30, Adverse Trend CAP, at 2.

²⁶ Exhibit 30, Adverse Trend CAP, at 3.

Q. Focusing again on the contribution to overall risk associated with dig-ins caused by erroneous maps or records, do you have knowledge as to the magnitude of this contribution to risk?

A. I do not. $\frac{27}{}$

PG&E also discusses some PHMSA data assessing excavation damage between states. PG&E opines that it performs favorably based on its selected metrics. In presenting the PHMSA data, PG&E's Opening Brief does not appear to differentiate between PG&E's at-fault and third party damage. It is possible that PG&E has performed well on the presented metrics because third parties have performed well.

In any event, Mr. Howe admitted the following at hearings: "I don't think any at-fault dig-ins is [sic] acceptable." Indeed, lurking within these figures is the reality that PG&E's mistakes can cause explosions and fatalities. Incidents such as the Carmel House Explosion demonstrate the consequences of this risk.

V. PG&E'S LENGTHY DESCRIPTION OF REMEDIAL MEASURES IS OF NO MOMENT

PG&E's Opening Brief contains a lengthy recitation of its recently-enacted remedial measures. PWA has already considered PG&E's remedial efforts in its Report. However, PG&E's failure to follow procedures, and opportunistic rather than proactive map correction activities, casts doubt into the efficacy of these new programs.

Furthermore, new programs do not excuse the violations. Nor should P&GE be granted leniency based on such new programs. Back in 2001, in the face of similar safety

²⁷ RT at 374:23 – 375:9 (Vol. 3).

²⁸ PG&E Opening Brief, at 13-15.

²⁹ RT at 225:21-22 (Vol. 2).

³⁰ See PG&E Opening Brief, at 17-30.

³¹ Exhibit 1, PWA Report, at 57-71.

³² Exhibit 1, PWA Report, at 1:22-28.

 $[\]frac{33}{2}$ Exhibit 1, PWA Report, at 1:31 – 2:2.

issues, PG&E also touted new policies. 34 The 2001 Correspondence declares that PG&E's remedial actions "will assure that personnel responding to an emergency will have access to accurate and up-to-date facilities information." Given the record of this proceeding, the Commission should not rely on PG&E's past or present assurances. Rather, PG&E should be held accountable for its failings.

VI. PG&E'S RELIANCE ON LLOYD'S EVALUATION IS **SELF-SERVING**

PG&E presents its commendations from Lloyd's Register as evidence in mitigation of its violations. ³⁶ PG&E also asserts that: "PWA assessed PG&E's achievement of these certifications as an 'innovative practice.'". On the same page of the PWA Report that PG&E cites, PWA testifies that:

> We have not evaluated this aspect of PG&E's program. In its response to SED-002-Q15, PG&E provided the initial Lloyd's register evaluation and a follow-up audit. These described inspections of practices and records that were made to achieve certification. SED audits still are finding records and mapping issues that PAS certification inspectors did not identify. This result brings into question how significant or valuable was the PAS certification and inspections if CPUC audits continue to find map and record issues. $\frac{38}{1}$

PWA also uses an "insufficient information" designation on this issue. 39

In any event, Lloyd's Register does not regulate PG&E. In SED's view, such evaluations supporting certification typically focus on process descriptions rather than on the results achieved from the application of those processes. Further, use of a paid evaluator, such as Lloyd's Register, may result in some degree of bias in the evaluation.

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³⁴ Exhibit 29, Letter from S. Bhattacharya to Z. Wong Re: Gas Incident Report - August 2, 2000, San Jose, CA - February 6, 2001 Letter (3/8/2001) (Redacted) ("2001 Correspondence"), at 1-2. <u>35</u> Exhibit 29, 2001 Correspondence, at 2.

³⁶ PG&E Opening Brief, at 28.

³⁷ PG&E Opening Brief, at 29 (citing Exhibit 1, PWA Report, at 64).

Exhibit 1, PWA Report, at 64 (internal citation omitted). Exhibit 1, PWA Report, at 64.

The Commission should exercise its independent judgement in ruling on PG&E's gas distribution recordkeeping violations. 40

VII. PG&E'S POSITION ON STANDARD OF CARE IS MERITLESS

PG&E's Opening Brief repeats PG&E's erroneous views both as to standard of care, as well as PWA's testimony on the subject. These views have already been rebutted in SED's Opening Brief. PG&E's attempt to substantially lower the bar for standard of care in order to accommodate its numerous records-related gas leaks and explosions should be given no weight. Furthermore, PG&E's mischaracterization of PWA's testimony on standard of care should be given no weight.

A. PG&E's View on Standard of Care is Excessively Permissive

PG&E would prefer to only be held accountable under a standard of "reasonable" compliance. Thus, in PG&E's view, an unspecified "reasonable" number of violations must be forgiven by the Commission. Among other mandates, Public Utilities Code ("PU Code") sections 451 and 702 should dissuade PG&E of this view. Contrary to PG&E's argument, PU Code section 451 is not a "premise" but rather a law. PG&E's license to operate a monopoly is not a license to violate the law.

Also, PG&E's belief that it is "continuously working to improve". does not alter the determination of whether a violation has occurred in the past. Mitigation through remedial measures does not absolve a violation, but rather is a factor in penalty assessment. 46

⁴⁰ PG&E's Opening Brief also comments that PWA was "[u]naware that PG&E had already been certified as compliant with the API 1173 standard." PG&E Opening Brief, at 29. The certification was done by Lloyd's Register. PG&E Opening Brief, at Appx. A-2.

⁴¹ SED Opening Brief, at 30-35.

⁴² PG&E Opening Brief, at 31.

⁴³ See PU Code §§ 451, 702.

⁴⁴ PG&E Opening Brief, at 31.

⁴⁵ PG&E Opening Brief, at 31.

⁴⁶ See SED's Opening Brief, at 89-90.

Further, SED has already discussed PG&E's self-serving concept of relying on "available information." Unavailable information is the problem being examined. In a case involving missing records, such as the instant OII, unavailable information should not offer a meaningful defense.

PG&E's standard of care also contains a "normal course of its business" qualifier. 48 Given the numerous gas leaks and explosions that PG&E has caused in recent years, and its volume of missing records, PG&E should not be permitted to rely on its normal course of business. PG&E's normal course of business does not offer a meaningful baseline for standard of care.

PG&E should not be permitted to pick and choose which rules to follow. For these reasons, as well as those discussed in SED's Opening Brief, PG&E's proposed standard of care should be rejected. 49

B. PG&E Mischaracterizes PWA's Testimony on Standard of Care

PG&E seeks to characterize PWA as requiring perfection, which is a standard that PWA agrees that no operator can obtain. In other words, PG&E advocates that PWA is requiring an overzealous "no typos, no papercuts" standard. This is a fragile premise, which ignores PWA's actual testimony on standard of care.

PG&E's defense focuses on certain "observables" identified by PWA. ⁵¹ While relegating root cause analysis to a footnote, ⁵² PG&E mischaracterizes the remaining "observables" as PWA's two elements for standard of care. ⁵³ PG&E did not correctly state the two elements that PWA advises that the Commission consider within the context of standard of care:

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⁴⁷ PG&E Opening Brief, at 33.

⁴⁸ PG&E Opening Brief, at 31.

⁴⁹ SED Opening Brief, at 30-35.

⁵⁰ PG&E Opening Brief, at 36-41.

⁵¹ PG&E Opening Brief, at 37.

⁵² PG&E Opening Brief, at 37, fn. 242.

⁵³ PG&E Opening Brief, at 37.

GO 112 represents the minimum requirements for design, construction, testing, operation and maintenance of gas systems in California. Regarding maps and records, there are also two elements to consider, both driven by regulations: (a) what information should be retained in an accessible form to support safe operations and maintenance, and (b) what process should be employed to compensate for acknowledged imperfections in maps and records. 54

In any event, PG&E misses the point on this issue. PWA's "observables" are not a stand-alone standard of care, but rather serve as analytical benchmarks used within the context of existing laws and regulations.

PWA does testify that "[t]he attainment of perfect maps and records is a worthy goal." Yet, PWA also explains that:

The PWA proposed standard of care as applied in our investigation - described in Section 6.1 and Attachment D in our initial testimony - did not require perfect maps and records. $\frac{56}{}$

Ultimately, the focus of this investigation is on impactful events, such as gas releases and explosions, as well as defects such as over a decade of missing records at the De Anza Division. Regarding maps and records, PWA's reasonable person standard, as described in SED's Opening Brief, should be adopted for this OII.⁵⁷ It is likewise reasonable for the Commission to expect that "whatever errors exist in PG&E's maps and records, measures must be in place to prevent the occurrence of 'impactful events.'" As explained in SED's Opening Brief, PWA's discussion of standard of care is also

⁵⁴ Exhibit 1, PWA Report, Attachment D, at 120. The two recommended elements were also identified within the body of the PWA Report. Exhibit 1, PWA Report, 37:5-8.

⁵⁵ Exhibit 1, PWA Report, Attachment D, at 122.

⁵⁶ Exhibit 2, PWA Reply, at 4.

⁵⁷ SED Opening Brief, at 30.

⁵⁸ Exhibit 2, PWA Reply, at 4.

consistent with precedent. PG&E's attempt to mischaracterize PWA's position on standard of care should be given no weight.

VIII. PG&E'S ARGUMENT THAT A NUMBER OF VIOLATIONS ARE OUT OF SCOPE IS MERITLESS

PG&E's Opening Brief argues that certain violations are out of the scope of this proceeding. 60 PG&E then enacts its own subjective definition of a "recordkeeping violation" and divides violations based on its categorization scheme. 61

PG&E is conflating this investigation's focus with its scope. For many incidents, a significant nexus exists between the recordkeeping failure, resultant operational failure, and subsequent harm. Furthermore, PG&E's failure to learn from its mistakes, or enact effective mitigation for its gas distribution system, within the context of its recordkeeping failures, falls squarely within the scope of this proceeding. Examining the incidents in PG&E's arbitrarily-defined vacuum was not ordered by the Scoping Memo or the OII.

The Scoping Memo states:

The scope of the matter properly before the Commission is whether or not PG&E violated any provision of the Public Utilities Code, general orders, federal law adopted by California, other rules, or requirements, and/or other state or federal law, by its recordkeeping policies and practices *with respect to maintaining safe operation of its gas distribution system.* If any such violations are proven, fines may be imposed in this matter pursuant to Pub. Util. Code §§ 2107 and 2108, and remedial operational measures may be directed pursuant to Pub. Util. Code §§ 451, 701, 761, and 768.

The OII defines the term "gas safety recordkeeping" as follows:

The Commission's focus will be to determine whether PG&E's gas safety recordkeeping has been conducted in a manner that violates the general provisions of Public Utilities

⁵⁹ See SED Opening Brief, at 31.

⁶⁰ PG&E Opening Brief, at 41-42.

⁶¹ See PG&E Opening Brief, at Appx. B, C.

 $[\]frac{62}{2}$ Assigned Commissioner's Scoping Memo and Ruling, dated: April 10, 2015 ("Scoping Memo"), at 3 (emphasis added).

Code §451, the recordkeeping violations cited in the SED Investigation Reports, and/or any other applicable law. Gas safety recordkeeping refers, but is not limited to, PG&E's acquisition, maintenance, organization, safekeeping, and efficient retrieval of data that the Commission finds is necessary and appropriate under the circumstances for PG&E to make good and safe gas engineering decisions, and thus to promote safety as required by Section 451 of the Public Utilities Code. 63

PG&E defines Milpitas Incident I, which resulting in an outage for nearly 1,000 customers, as "not a recordkeeping incident." 64 Under cross-examination by SED, Mr. Higgins explained PG&E's defense on this point.

> Additionally, we ultimately found this a normally open valve that at some point was inadvertently closed, and the valve is actually open and intended to be open. So the record is actually correct. The physical record is actually correct. It is the position of the valve, in fact, in the field that wasn't *correct.* I hope that clarifies. 65

PG&E admits that its records did not match the conditions in the field. The basic premise that PG&E is ignoring in its defense is that good recordkeeping assumes concurrence between records and the conditions in the field. Paper or computerized records do not distribute natural gas. The function of those records is to advise as to the conditions in the field.

Moreover, Milpitas Incident I was described in the OII, 66 and SED's Incident Investigation Report was attached as an Appendix to the OII. 67 As the OII explains:

> In support of the allegations, SED asserts that PG&E failed to monitor pressure gauges while the job was in progress as required by PG&E standards A-93.1 and D-S0454, and that the operating position for valve 3352-E2A reflected on the

65 RT at 286:6-15 (Vol. 2) (emphasis added).

⁶³ OII. at 8.

⁶⁴ PG&E Opening Brief, Appx. B-5.

⁶⁶ OII. at 4-5.

<u>67</u> OII, Appx. A-3.

map did not match the actual field operating position, which thereby provided inaccurate information to PG&E personnel. 68

Milpitas Incident I would not have happened but for the incorrect records. PG&E also failed to mitigate its known recordkeeping problems by failing to monitor the pressure gauge. PG&E's statement of the facts admits that "[t]he pressure gauge was not monitored from approximately 1145 hours to 1300 hours." If PG&E had monitored the pressure gauge, the incident could have been avoided, and simply reported to the Commission as one of PG&E's numerous mapping errors. Likewise, if PG&E had checked the correspondence of the valve position with that shown on its maps at the outset, the incident could have been prevented. This incident demonstrates a substantial nexus between the incorrect records, the operational failure, and the resultant harm. It is necessary and proper for the Commission to review the totality of these circumstances in order to protect public safety. To

Beyond that, the OII acknowledges that there is a nexus between records and operational actions:

The SED Investigation Reports present us with a strong showing that PG&E may have violated applicable law. We infer that the state of PG&E's records regarding critical infrastructure (in this case, its gas distribution pipelines) may have been inadequate to make *critically important*, *ongoing safety decisions*. 71

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⁶⁸ OII, at 5. PG&E violated 49 CFR § 192.605(a) for failing to follow these standards. See SED Opening Brief, at 76-77. PG&E also violated 49 CFR § 192.605(b)(3) twice in relation to this incident, as shown by the two occasions when inaccurate information was provided. "The valve position was manually transcribed as 'OPEN' in the SynerGEE model based on the plat sheet, which resulted in the inaccuracy in the SynerGEE model conducted prior to the distribution main transfer." OII, Appx. A-3, at 10. See SED Opening Brief, at 84-85.

Exhibit 6, Attachments Supporting PG&E Reply Testimony Chapters 1-5; Volume 2 of 4 (Attachments 23-75) (Redacted), Attachment W040 ("PG&E's Final Statement of the Facts, dated: April 10, 2015"), at W040.006.

⁷⁰ Cal. Pub. Util. Code § 701.

 $[\]frac{71}{2}$ OII, at 7 (emphasis added).

The OII's inclusion of Milpitas Incident I, and the Scoping Memo, gave PG&E fair notice that operational actions, associated with recordkeeping failures, were germane to this proceeding. PG&E's "out of scope" defense is baseless, and should not be given any weight.

IX. PG&E'S DEFENSES REGARDING CERTAIN VIOLATIONS ASSOCIATED WITH THE 19 INCIDENTS ARE MERITLESS

PG&E raises numerous arguments against certain violations associated with the 19 incidents. While the OII, PWA's testimonies and SED's Opening Brief address such issues in exhaustive detail, SED shall reply to certain points in order to clarify the record.

A. Carmel House Explosion

PG&E contests the recordkeeping violations associated with the Carmel House Explosion. In particular, PG&E outlines a "lack of specificity" defense: "SED has not proven that PG&E failed to prepare or follow a specific recordkeeping standard or procedure when the record was created, as required by section 192.605(a), because SED does not cite any recordkeeping procedure." This argument is parallel to PG&E's generalized objection to the 49 CFR section 192.605(a) violations. On this issue, PG&E has failed to establish that SED is required to point to a specific section within PG&E's internal standards in assessing PG&E's violations. Indeed, given PG&E's ever-changing standards, such a requirement would be unduly burdensome.

Nevertheless, the specific procedure cited for this violation category was discussed in SED's Incident Investigation Report, which was attached to the OII.

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⁷² The OII also states that: "This proceeding shall: (1) Determine whether PG&E violated any provisions of the Public Utilities Code, general orders, Commission decisions, federal gas safety regulations and laws that the federal government has authorized the Commission to enforce in California regarding its gas distribution recordkeeping, *and/or other state or federal law.*" OII, at 10 (emphasis added). ⁷³ PG&E Opening Brief, at 53-54, and Appx. B-13.

⁷⁴ PG&E Opening Brief, at Appx. B-13. PG&E's lack of specificity defense fails to address its concession at hearings that "an operator is ultimately responsible to demonstrate ... compliance with state and federal recordkeeping requirements including completeness and accuracy." RT at 341:9-16 (Vol. 2).
⁷⁵ See PG&E Opening Brief, at 43-44.

Mapping Procedures

In 1997 and 1998, the applicable mapping procedure for PG&E was Mapping Standard 410.21-1. After the insertion of the plastic pipe into the main and service by field crews, a record of change is turned in to the PG&E's mapping group. Mapping Standard 410.21-1 sections, "II. Gas Mains. 15. Insert Mains..." and "III. Gas Services. 9. Insert Service..." required an update of the existing maps to reflect the conditions that existed in the field. As of 08/15/2014 PG&E has been unable to find any record of the plastic insertions that took place along 3rd Avenue in Carmel. 76

The PWA Report further discusses the standard's detailed requirements in order to "capture accurate and sufficient information for maps to be used by operating personnel."⁷⁷ There should be no dispute that PG&E had notice regarding the relevance of Mapping Standard 410.21-1 to this proceeding, as the standard was included in PG&E's own workpapers. Further, PG&E's updates to its mapping standards do not change the underlying principle that:

> It is PG&E's policy to create, maintain and reevaluate, as needed, a set of accurate, current and legible maps which reflect the company's requirements. Such maps are required for the safe operation of the gas distribution system. $\frac{79}{1}$

PG&E failed to update its maps when it installed the plastic service, a violation which continued until the date of the incident. As explained in SED's Incident Investigation Report:

> PG&E failed to follow Mapping Standard 410.21-1 and update records of the gas distribution system when the distribution main along 3rd Avenue in Carmel was inserted

 $[\]frac{76}{1}$ OII, Appx. A-6, at 29.

⁷⁷ Exhibit 1, PWA Report, at 1:25-26 (emphasis added). See generally Exhibit 1, PWA Report, at 1:22-28, and fn. 3.

²⁸ Exhibit 6, Attachments Supporting PG&E Reply Testimony Chapters 1-5; Volume 2 of 4 (Attachments 23-75) (Redacted), Attachment W075 ("Gas Mapper Manual - Section 1").

⁷⁹ Exhibit 6, Gas Mapper Manual – Section 1, at W075.002 (Distribution &Customer Service ("DCS") Standard D-S0457). See generally Exhibit 6, Gas Mapper Manual – Section 1, at W075.001- W075.081.

with 1 ¼-inch plastic. Similarly, PG&E failed to follow and update its records when the service line to the house damaged by the explosion was inserted with a 1/2-inch plastic. Therefore, SED finds PG&E in violation of Title 49 CFR § 192.605(a) ... 80

PG&E's failure to follow its own procedures is not subject to dispute. Rather, PG&E contests the specificity of SED's articulation of the violation. Yet, SED did point to a specific recordkeeping procedure. PG&E's defense regarding 49 CFR section 192.605(a) is baseless, and should not be given any weight.

PG&E also disputes its violation of 49 CFR section 192.605(b)(3) regarding the Carmel House Explosion. PG&E opines that: "[f]or the reasons already explained, the existence of an inaccurate record does not establish a violation of section 192.605(b)(3); the regulation only requires PG&E to have procedures, which PWA agrees that PG&E has." This argument is parallel to PG&E's generalized objection to the 49 CFR section 192.605(b)(3) violations. Section 192.605(b)(3) violations.

PG&E's defense is premised on the fiction that having an Operations and Maintenance ("O&M") manual, which contains the specified subsections, establishes compliance. This is a very low bar. PWA's agreement regarding the existence of PG&E's procedures does not signify acceptance of the premise that the existence of such procedures establishes compliance. The CFR requires that O&M manuals be followed in order to promote safety. 84

SED's Incident Investigation Report states:

PG&E's failure to update its records led to the company providing incomplete information about the distribution main to its workers. Therefore, SED finds PG&E in violation of Title 49 CFR § 192.605(b) ... $\frac{85}{2}$

81 PG&E Opening Brief, at Appx. B-13.

⁸⁰ OII, Appx. A-6, at 31.

⁸² PG&E Opening Brief, at 53 (internal citation omitted).

⁸³ See PG&E Opening Brief, at 45-47.

⁸⁴ See 49 CFR §§ 192.13, 192.13.605(a).

⁸⁵ OII, Appx. A-6, at 32. Subpart 3 is also quoted in the text of the report. OII, Appx. A-6, at 32.

In other words, PG&E's failure to provide an accurate map to appropriate operating personnel, on the day of the incident, violated 49 CFR § 192.605(b)(3). PG&E could not have provided such a map, because it had failed to update its records. This ultimately resulted in the explosion. PG&E's defense regarding 49 CFR section 192.605(b)(3) is baseless, and should not be given any weight.

B. Mountain View Incident

Regarding the 49 CFR section 192.605(a) violation associated with the Mountain View Incident, PG&E proffers the same "lack of specificity" defense that it asserted regarding the Carmel House Explosion. ⁸⁶ As explained above in relation to the Carmel House Explosion, the same procedure discussed in the Appendix of the OII, ⁸⁷ and the PWA Report, Mapping Standard 410.21-1, along with its subsequent updates, is applicable. PG&E failed to update its maps when it installed the plastic service, a violation which continued until the date of the incident.

As with the Carmel House Explosion, PG&E's failure to follow its own procedures is not subject to dispute. Rather, PG&E contests the specificity of SED's articulation of the violation. Yet, SED did point to a specific recordkeeping procedure. PG&E's defense regarding 49 CFR section 192.605(a) is baseless, and should not be given any weight.

PG&E concedes the 49 CFR section 192.605(b)(3) violation associated with the Mountain View Incident.⁸⁹

C. Milpitas Incident II⁹⁰

Regarding the 49 CFR section 192.605(b)(3) violation associated with Milpitas Incident II, PG&E proffers the same "O&M manual existence" defense that it asserted

⁸⁶ PG&E Opening Brief, at Appx. B-8.

⁸⁷ OII, Appx. A-6, at 29, 31.

⁸⁸ Exhibit 1, PWA Report, at 1:22-28, and fn. 3.

⁸⁹ PG&E Opening Brief, at 49-50.

⁹⁰ Milpitas Incident I is discussed above in relation to PG&E's "out of scope" defense.

regarding the Carmel House Explosion. Per the PWA Report: "PWA determined that PG&E was in violation of 49 CFR §192.605(b)(3) - for not providing its construction records, maps and operating history to its L&M crew (the map had not been updated with the location of the nearest ETS installed 1994)." PG&E's defense regarding 49 CFR section 192.605(b)(3) is baseless, and should not be given any weight.

D. Morgan Hill Incident

PG&E objects to its violation of 49 CFR §192.605(a) on the basis that TD-9500P-16 is not, in its view, a recordkeeping procedure. PG&E argues that:

SED has not proven that PG&E failed to prepare or follow a specific recordkeeping standard or procedure when the record was created, as required by section 192.605(a), because TD-9500P-16 is not a recordkeeping procedure. 93

In SED's Incident Investigation Report, which was attached to the OII, the following bases are provided:

- (3) PG&E is also in violation of 49 CFR §192.605(a) for not following its own procedures:
- (a) The mark and locate employee failed to follow the PG&E's procedure TD-4412P-03, and did not contact Mapping Department when he was unable to locate the service line that was struck.
- (b) Because PG&E did not properly document the service line deactivation, PG&E failed to monitor stub services or to cut off at the main within 1 year of identifying that the stub will not be needed in the future as required by TD-9500P-16.
- (c) The Gas Foreman on the repair crew that responded on the day of the incident failed to submit a new Gas Service Record to local Gas Mapping indicating that the damaged gas service was deactivated at the main after making

⁹¹ PG&E Opening Brief, at Appx. B-12.

⁹² Exhibit 1, PWA Report, at 39:13-15.

⁹³ PG&E Opening Brief, at Appx. B-15.

repairs. This is a violation of PG&E's procedure S5458 (current version TD-9500P-14). 94

PG&E's argument omits the recordkeeping requirements associated with, for example, monitoring stub services. PG&E's defense regarding 49 CFR section 192.605(a) is baseless, and should not be given any weight.

Regarding the 49 CFR section 192.605(b)(3) violation associated with the Morgan Hill Incident, PG&E proffers the same "O&M manual existence" defense that it asserted regarding the Carmel House Explosion. According to the PWA Report, PG&E violated 49 CFR section 192.605(b)(3) by failing to provide "up to date operating history of its facilities to appropriate personnel (L&M personnel)." PG&E's defense regarding 49 CFR section 192.605(b)(3) is baseless, and should not be given any weight.

E. Castro Valley Incident

PG&E contests the recordkeeping violations associated with the Castro Valley Incident. PG&E critiques SED for citing PG&E using Standard UO S4460, which PG&E applies to transmission lines. As discussed in the OII, the standard ensures that operating maps and diagrams are updated and accurate. The same principle applies to gas distribution records, as explained above regarding the Carmel House Explosion. Mapping Standard 410.21-1, along with its subsequent updates, is applicable.

The condition of the record does not provide an effective defense for PG&E on this point. As ALJ Bushey explained to PG&E after PWA was cross-examined on this point:

⁹⁴ OII, Appx. A-2, at 7.

⁹⁵ Exhibit 7, Attachments Supporting PG&E Reply Testimony Chapters 1-5; Volume 3 of 4 (Attachments 76-116) (Redacted), Attachment W091, ("Utility Procedure TD-9500P-16"), at W091.005.

⁹⁶ PG&E Opening Brief, at Appx. B-15.

⁹⁷ Exhibit 1, PWA Report, at 38:7-8.

⁹⁸ PG&E Opening Brief, at Appx. B-17.

⁹⁹ PG&E Opening Brief, at Appx. B-17.

¹⁰⁰ OII, at 3.

ALJ BUSHEY: Mr. Hill, is there a similar rule like this for distribution lines?

MR. HILL: Your Honor, I don't know the answer to that off the top of my head.

ALJ BUSHEY: Okay. Citing the wrong procedure, utility operations, is not really enough of an error on their part. 101

PG&E has not established a relevant error on SED's part.

Regarding the 49 CFR section 192.605(b)(3) violation associated with the Castro Valley Incident, PG&E proffers the same "O&M manual existence" defense that it asserted regarding the Carmel House Explosion. According to the SED Incident Investigation Report, PG&E "did not make accurate construction records, maps, and operating history available to appropriate operating personnel." SED's Incident Investigation Report notes that: "[t]he mapping error has been corrected and PG&E claims that plat map errors are found throughout PG&E's service territory and each division is working to correct them as they are identified." PG&E's defense regarding 49 CFR section 192.605(b)(3) is baseless, and should not be given any weight.

F. Colusa Incident

PG&E asserts that the Colusa Incident is not a recordkeeping incident. PG&E offers that its "crew foreman did not recognize a symbol on the map as indicating the potential presence of an offset," resulting to the PG&E gas crew digging into an unmarked main. PG&E's arguments that a specific procedure was not cited, and that SED had not previously cited PG&E for this incident, do not excuse PG&E's conduct.

¹⁰¹ RT at 159:22 – 160:1 (Vol. 1).

¹⁰² PG&E Opening Brief, at Appx. B-17.

¹⁰³ OII, Appx. A-1, at 3.

¹⁰⁴ OII, Appx. A-1, at 3.

¹⁰⁵ PG&E Opening Brief, at Appx. B-3.

¹⁰⁶ PG&E Opening Brief, at Appx. B-3

Indeed, per PU Code § 2109 a utility is responsible for the actions of its officers, agents, or employees. 107

Further, in its reply testimony, PWA states:

Per 49 CFR §192.603(b)(3), PG&E has the responsibility to provide maps and records to L&M personnel to support them in conduct of their job responsibilities. Furthermore, if the maps or records are inconsistent with the L&M staff experience, training and qualification, that represents a violation of 49 CFR §192.805(h).

Although PG&E claims that the plat map used by the PG&E personnel indicated the "potential" presence of an offset, PG&E is unable to show that the map provided to its personnel was complete and accurate, so as to indicate the actual location of the offset. Had the plat map used to locate the subsurface facilities been complete, including a clear indication of the location of the pipe offset, the excavation damage could have been prevented. There was plainly a substantial nexus between the dig-in itself and the mapping error.

Finally, PG&E's attempt to characterize the subject 2" line as a transmission line is baseless. While a utility can change such designations, there are applicable criteria that must be met. Avoiding an applicable violation through an "out of scope" argument is not adequate basis to change such designations.

PG&E should be found in violation of the applicable code sections.

G. San Ramon Incident

PG&E argues that violations cannot be established for this incident due to its perception that SED's allegations lacked specificity and because it views having an O&M manual as sufficient for compliance. SED has already explained that these arguments are meritless. Procedures must be followed and operators are responsible for providing personnel with the necessary records and maps to safely conduct their work.

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¹⁰⁷ PU Code § 2109.

¹⁰⁸ Exhibit 2, PWA Reply, at 22.

¹⁰⁹ PG&E Opening Brief, at Appx. B-18.

PG&E further views certain allegations as "non-recordkeeping." This dig-in incident was caused by PG&E's failure to mark an unmapped 2-inch service line. The inaccuracy in the plat map shows that PG&E procedures addressing the creation and/or maintenance of records and maps were not followed. Further, there was a substantial nexus between the dig-in and the mapping error. PG&E should be found in violation of the applicable code sections.

H. Antioch Incident

PG&E essentially argues that the Antioch Incident is not a recordkeeping incident. PG&E points to the fact that the incident occurred following a locator's use of electrical means to mark out a pipeline. The signal emanating from the pipeline turned out to be incorrect, causing the locator to mismark the pipeline.

This incident resulted from the incorrect marking of PG&E's 2-inch plastic main. Indeed, the markings were approximately 14 feet away from the actual location of the main. PG&E believes that the "line was incorrectly marked due to a disconnected locating wire and a stray locating signal." 116

In its prepared testimony, PG&E witness John Higgin describes "electrical means including conduction, induction, use of tracer wires, and passive location methods... are the most accurate and preferred methods throughout the industry for finding buried facilities." Further, at the hearings, Mr. Higgins testifies as follows:

Q: Are you saying by this testimony that indirect means are better than using a map to locate facilities?

¹¹⁰ PG&E Opening Brief, at Appx. B-18.

¹¹¹ Exhibit 1, PWA Report, at 47.

¹¹² PG&E Opening Brief, at Appx. B-4.

¹¹³ PG&E Opening Brief, at Appx. B-4.

¹¹⁴ PG&E Opening Brief, at Appx. B-4.

¹¹⁵ Exhibit 1, PWA Report, at 44.

¹¹⁶ Exhibit 6, Attachments Supporting PG&E Reply Testimony Chapters 1-5; Volume 2 of 4 (Attachments 23-75) (Redacted), Attachment W062 ("Antioch Letter"), at W062.001.

¹¹⁷ Exhibit 4, Chapter 3: Field Operations ("Higgins Testimony"), at 3-13:18-21.

A: Yeah. I think in many instances they are. Map is another tool in our tool box. 118

This incident presents an example of the limitations posed by excessive reliance on the use of PG&E's identified locating technologies, given PG&E's inaccurate maps. Nevertheless, PG&E's attempt to downplay the importance of maps in locating and marking subsurface facilities does not negate the substantial nexus between the mapping error and the operational failure that occurred, resulting in this incident. PG&E should be found in violation of the applicable code sections.

I. Alameda Incident

PG&E argues that this incident is not a recordkeeping incident, and that its plat map was correct; however the "locator misunderstood the position of the property line from which he calculated his marks." 119

In its reply testimony, PWA states:

...[A]s a result of this latest information, PWA cite PG&E in violation of 49 CFR §192.614(c)(5) and California Government Code 4216.3(a)(1) for failure to provide accurate temporary marking for its subsurface facilities, and 49 CFR §192.605(a) for failure to follow its procedures – the L&M crew did not contact mapping when the field locate and map did not agree or make sense..."120

Further, "...the quality and accuracy of maps and records directly follow from recordkeeping practices. When employee practices devolve such that maps and records are not used or relied upon to assist in accurately locating and marking lines, or identifying the location of stubs and plastic inserted gas lines, this is a direct result of the quality, completeness and accuracy of PG&E's recordkeeping practices." ¹²¹

¹¹⁸ RT at 266:1-6 (Vol. 2).

¹¹⁹ PG&E Opening Brief, at Appx. B-2.

¹²⁰ Exhibit 2, PWA Reply, at 24.

¹²¹ Exhibit 2, PWA Reply, at 23.

Indeed, if the L&M crew had any concerns about the map not matching the conditions in the field, then that crew should have contacted mapping per PG&E's damage prevention manual. PG&E should be found in violation of the applicable code sections.

J. Roseville Incident

PG&E argues that violations cannot be established for this incident due to its perception that certain allegations are "non-recordkeeping" and because it views having an O&M manual as sufficient for compliance. SED has already explained that these arguments are meritless. Procedures must be followed and operators are responsible for providing personnel with the necessary records and maps to safely conduct their work.

This incident was caused by PG&E mismarking a 2-inch plastic main. 123 The plat map used by the PG&E locator showed the damaged section of the pipe as located in a joint trench, when it was later determined to be at an offset. 124 The inaccuracy in the plat map shows that PG&E procedures addressing the creation and/or maintenance of records and maps were not followed. Further, there was a substantial nexus between the damage and the mapping error. PG&E should be found in violation of the applicable code sections.

K. Kentfield Incident

PG&E argues that violations cannot be established for this incident due to its perception that SED's allegations lacked specificity and because it views having an O&M manual as sufficient for compliance. PG&E fails to address PWA's specific allegation that PG&E failed to follow PG&E Mapping Bulletin 05-01, to update its records and maps to reflect the new plastic main. Regardless, SED has already explained that these

¹²² PG&E Opening Brief, at Appx. B-14.

¹²³ Exhibit 1, PWA Report, at 45.

¹²⁴ Exhibit 1, PWA Report, at 21.

¹²⁵ PG&E Opening Brief, at Appx. B-11.

¹²⁶ Exhibit 1, PWA Report, at 18.

arguments are meritless. Procedures must be followed and operators are responsible for providing personnel with the necessary records and maps to safely conduct their work.

PG&E further views certain allegations as "non-recordkeeping." This incident was caused by PG&E's mismarking of an active 2-inch plastic main installed with a tracer wire months before the dig-in occurred. The 2-inch plastic main was not shown on the PG&E map, nor was it marked in the area of excavation. There was a substantial nexus between the dig-in and the mapping error. PG&E should be found in violation of the applicable code sections.

L. Sacramento Incident

PG&E argues that violations cannot be established for this incident due to its perception that SED's allegations lacked specificity and because it views having an O&M manual as sufficient for compliance. SED has already explained that these arguments are meritless. Procedures must be followed and operators are responsible for providing personnel with the necessary records and maps to safely conduct their work.

PG&E further views certain allegations as "non-recordkeeping." This incident was caused by PG&E's mismarking of the damaged 1 ¼-inch plastic service line. The service was not accurately updated to reflect the presence of two offsets in the line. The mismarking of the service line on the map shows that PG&E's recordkeeping procedures, which would otherwise require mapping of the plastic service, were not followed.

Furthermore, there was a substantial nexus between the damage and the mapping error. PG&E should be found in violation of the applicable code sections.

¹²⁷ PG&E Opening Brief, at Appx. B-11.

¹²⁸ Exhibit 1, PWA Report, at 18, 43.

¹²⁹ Exhibit 1, PWA Report, at 18, 43.

¹³⁰ PG&E Opening Brief, at Appx. B-10.

¹³¹ PG&E Opening Brief, at Appx. B-10.

¹³² Exhibit 1, PWA Report, at 46.

¹³³ Exhibit 1, PWA Report, at 46.

M. Alamo Incident

Aside from raising arguments about the applicability of PU Code § 451, PG&E essentially views this incident as "non-recordkeeping." ¹³⁴

For the Alamo Incident, PG&E failed to locate and mark its subsurface facilities in response to an emergency USA ticket resulting in excavation damage to an unmarked ½-inch plastic service and an adjacent ¾-inch steel service tee. The available map provided to the PG&E locate and mark personnel did not have the locate dimensions. PG&E's Opening Brief states that the pipe could not be located precisely. Underlying this defense is the excuse that the map had been acquired from another company that did not provide the needed specifications. However, PG&E is ultimately responsible for its facilities and records, including those obtained through acquisition.

Furthermore, there was a substantial nexus between the mapping issue and the resultant incident. PG&E should be found in violation of the applicable code sections.

N. Lafayette Incident

PG&E argues that SED has not proven that PG&E failed to prepare, maintain, or follow a specific recordkeeping standard or procedure when the record was created, as required by 49 CFR §192.605(a) because the standard cited is not a recordkeeping procedure. PG&E further views certain allegations as "non-recordkeeping." PG&E further views certain allegations as "non-recordkeeping."

In the Lafayette Incident, damage resulted from an incorrect gas service record which indicated the ³/₄-inch steel service line was cut off. The incorrect information

¹³⁴ PG&E Opening Brief, at Appx. B-9.

¹³⁵ Exhibit 1, PWA Report, at 22.

¹³⁶ Exhibit 1, PWA Report, at 22.

¹³⁷ PG&E Opening Brief, at Appx. D-2.

¹³⁸ Exhibit 4, Higgins Testimony, at 3-34:27-30.

¹³⁹ See PU Code § 2109.

¹⁴⁰ PG&E Opening Brief, at Appx. B-16.

¹⁴¹ PG&E Opening Brief, at Appx. B-16.

¹⁴² Exhibit 1, PWA Testimony, at 16, 42.

had caused the removal of the service line from the PG&E maps. ¹⁴³ The PG&E standard cited by SED, S4129, requires cutting off services as close to the main as possible. ¹⁴⁴ The fact that the service was not cut off at the main per PG&E standard S4129, resulted in the service stub not being located and marked by the PG&E locator. Additionally, a clear recordkeeping violation is seen in the inaccurate gas service record, which in turn resulted in the removal of the service from the plat map. Both instances are violations of 49 CFR §192.605(a) for failure to follow internal procedures when cutting off the service and when completing the gas service record upon completion of work.

Furthermore, there was a substantial nexus between the recordkeeping issue and the damage. PG&E should be found in violation of the applicable code sections.

O. San Francisco Incident

PG&E essentially argues that the San Francisco Incident is "non-recordkeeping." This incident resulted from PG&E's failure to locate and mark an 8-inch steel main and the portion of the one-inch plastic service line that tapped off the eight-inch main. The PG&E locator marked an inactive distribution main located approximately six feet from the active line. PG&E failed to mark the portion of the one-inch plastic service between the inactive and active mains. This resulted in the excavator damaging the unmarked portion of the one-inch plastic service.

In its report, PWA noted the issue of abandoned mains being removed from maps, which is a recordkeeping-related concern. For this incident, an indication on the map or record regarding the presence of an abandoned main would have alerted the PG&E

¹⁴³ Exhibit 1, PWA Testimony, at 42.

¹⁴⁴ Exhibit 1, PWA Testimony, at 42.

¹⁴⁵ PG&E Opening Brief, at Appx. B-6.

¹⁴⁶ Exhibit 1, PWA Report, at 23.

¹⁴⁷ Exhibit 1, PWA Report, at 23.

¹⁴⁸ Exhibit 6, Attachments Supporting PG&E Reply Testimony Chapter 1-5; Volume 2 of 4 (attachments 23-75) (Redacted). Attachment W055 ("List of Incidents with Probable Violations"), at W055.003.

¹⁴⁹ Exhibit 1, PWA Report, at 23.

¹⁵⁰ Exhibit 1, PWA Report, Attachment E, at 125.

locator to proceed with the locate and mark with more caution, including verifying the accuracy of the marks for the active main with the Mapping Department prior to leaving the site. This incident illustrates the importance of providing complete and accurate information to field personnel.

PG&E should be found in violation of the applicable code sections.

P. Fresno Incident

PG&E argues that violations cannot be established for this incident due to its perception that SED's allegations lacked sufficiency, despite citation to Mapping Standard 410.2-1, and because it views having an O&M manual as sufficient for compliance. SED has already explained that these arguments are meritless. Procedures must be followed and operators are responsible for providing personnel with the necessary records and maps to safely conduct their work.

For this incident, PG&E mismarked a 1-inch plastic gas service line. The plat map used by the PG&E crew did not reflect the offset information resulting the in the PG&E gas crew damaging the one-inch service line. The inaccuracy in the plat map shows that PG&E procedures addressing the creation and/or maintenance of records and maps were not followed. PG&E should be found in violation of the applicable code sections.

Q. San Jose Incident I

PG&E essentially argues that San Jose Incident I is "non-recordkeeping." Nevertheless, as with other incidents discussed above, PG&E's failure to follow procedures resulted in the incident. PG&E should be found in violation of the applicable code sections.

¹⁵¹ PG&E Opening Brief, at Appx. B-20.

¹⁵² Exhibit 1, PWA Report, at 23.

¹⁵³ Exhibit 1, PWA Report, at 23.

¹⁵⁴ PG&E Opening Brief, at B-7.

R. San Jose Incident II

PG&E argues that violations cannot be established for this incident due to its perception that SED's allegations lacked sufficiency, despite citation to Mapping Standard 410.2-1, and because it views having an O&M manual as sufficient for compliance. PG&E also argues that certain allegations are "non-recordkeeping." SED has already explained that these arguments are meritless. Procedures must be followed and operators are responsible for providing personnel with the necessary records and maps to safely conduct their work.

This incident was caused by PG&E's failure to mark an unmapped 1 ¼-inch steel stub. 157 The inaccuracy in the plat map shows that PG&E procedures addressing the creation and/or maintenance of records and maps were not followed. Further, there was a substantial nexus between the recordkeeping issue and the damage. PG&E should be found in violation of the applicable code sections.

X. PG&E'S ADMISSION LETTER HAS NOT BEEN EFFECTIVELLY RETRACTED BY PG&E

PG&E concedes the "Mountain View violation." Yet, in PG&E's view, the admission letter stating that it had violated CFR §192.605(b) was signed under "unique circumstances" and without a "regulatory analysis." PG&E's admission language was: "PG&E agrees with this violation." 160

Despite its use of the word "agrees" in the admission letter, PG&E appears to characterize its admission as more of a capitulation than an agreement. In PG&E's apparent view, it agreed with the violation because of timing and the strength of SED's position, rather than due to a belief that SED was in the right. Yet, PG&E's subjective

¹⁵⁵ PG&E Opening Brief, at Appx. B-19.

¹⁵⁶ PG&E Opening Brief, at Appx. B-19.

¹⁵⁷ Exhibit 1, PWA Report, at 15.

¹⁵⁸ PG&E Opening Brief, at 50.

¹⁵⁹ PG&E Opening Brief, at 49-50.

¹⁶⁰ Exhibit 36, Letter from S. Singh to M. Robertson Re: Response to March 6, 2014 Gas Incident Violation Letter, Mountain View, California (4/4/2014) ("Mountain View Admission Letter"), at 1.

basis for the admission is of no consequence. The Commission has an undisputed basis to adopt PG&E's admission that it violated CFR § 192.605(b).

Interestingly, this is the one area where PG&E concedes that the record supports a violation. Indeed, PG&E sets a very high bar for the Commission in this OII. A written admission of a violation, signed by the Company, appears to meet PG&E's standard for the Commission to find a utility in violation of applicable law. In SED's view, it is infeasible to routinely require written admission language in order to make such determinations.

PG&E's admission also runs counter to PG&E's witness Mr. Howe's overstatement in his prepared testimony that:

PG&E respectfully disagrees that it has violated the statutory provisions and regulations identified in the OII and the September 30, 2015 P Wood Associates Report (PWA Report or Report). 162

PG&E's Opening Brief addresses the discrepancy between its stated position and its admission in a footnote. In any event, PG&E's Opening Brief offers no compelling argument against SED's view of the admission letter.

XI. THERE IS A SUBSTANTIAL NEXUS BETWEEN THE MISSING DE ANZA LEAK REPAIR RECORDS AND THE MOUNTAIN VIEW INCIDENT

PG&E's arguments regarding the missing De Anza records are not compelling.

PG&E admits that, regarding the Mountain View Incident, "sometime between 1972 and the mid-1980s the plastic line had been inserted." Given the missing records, this admission supports an adverse inference that would toll the applicable violation back to

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¹⁶¹ PG&E Opening Brief, at 50.

¹⁶² Exhibit 4, Howe Testimony, at 1-3:3-5.

¹⁶³ PG&E Opening Brief, at 43, fn. 269.

¹⁶⁴ See SED Opening Brief, at 42-47.

¹⁶⁵ OII. at 6.

1972. PG&E apparently uses this admission to steer the unknown date of installation outside the date range of the missing De Anza records, 1979-1991. Yet, this runs counter to PG&E own CAP Item on the topic, which states:

The inserted service plastic pipe is probably installed in the 80s (orange, TR-418). However, existing service records was [sic] not updated and existing plat map didn't show it was inserted. Leak repair records from 1979-1991 in the De Anza division were missing. 168

At hearings, when presented with this information, Mr. Singh confirmed that the reference to the 80s indicated the 1980s.

Q. ... This is regarding the Mountain View incident. It states the inserted service plastic pipe was probably installed [in] the 80s. Do you see that?

A. I do.

Q. Okay. It is a fair interpretation that refers to the 1980s, right?

A. I would presume so. 169

The 1980s fall squarely within the 1979-1991 date range for the missing De Anza records.

Further, PG&E's Internal Gas Incident Review for the Mountain View Incident opines, under "Lessons Learned / Recommendations" that: "[t]he record for the last leak repair for this gas service was missing. Upon further research, all the leak repairs done between 1979 to 1991 [sic] in the De Anza Division are missing." Per its internal review's recommendations, PG&E then conducted an "extensive search" for the missing

 $[\]underline{^{166}}$ See Reeves v. MV Transportation (2010) 186 Cal. App 4th 666, 681-82.

¹⁶⁷ PG&E Opening Brief, at 52.

¹⁶⁸ Exhibit 6, Attachments Supporting PG&E Reply Testimony Chapters 1-5; Volume 2 of 4 (Attachments 23-75) (Redacted), Attachment W049 ("CAP Item"), at W049.002.

¹⁶⁹ RT at 479:8-16 (Vol. 3).

¹⁷⁰ Exhibit 6, Attachments Supporting PG&E Reply Testimony Chapters 1-5; Volume 2 of 4 (Attachments 23-75) (Redacted), Attachment W048 ("Internal Gas Incident Review"), at W048.003.

records. 171 According to the dates listed on the CAP Item, the unsuccessful search apparently lasted for months. 172 Such a search would not have been a worthwhile endeavor if, as PG&E would have this Commission believe, all of the missing records were "preserved in an electronic database." 173

Beyond that, PG&E's argument that a leak repair record may not even have been generated during the installation of the plastic insert is speculative and inconsequential. Regardless of whether the record ever existed, it was missing when it was needed. According to PG&E's internal review for the Mountain View Incident, under "Root Cause," "[t]he inserted 1 [inch] plastic service was not mapped." 175

Ultimately, PG&E's arguments regarding the missing De Anza records do not excuse PG&E of this substantial recordkeeping failure. Nor has P&GE succeeded in decoupling this substantial volume of missing records from its own internal Mountain View investigation. In any event, to the extent that a given investigative fact cannot be proven, because PG&E lost the underlying record, the Commission can draw an adverse inference against PG&E's position regarding that fact. 176

XII. PG&E'S ARGUMENTS ON THE MAOP ISSUE ARE MERITLESS

PG&E's argument that its alternative method for setting MAOP is consistent with regulatory guidance is unpersuasive. 177

A. PG&E's Argument About a Transcription Error Should Be Given No Weight

In its Opening Brief, PG&E argues that the PWA Report misquotes a section of General Order 112. Exhibit 15 indicates that General Order 112, Section 303.2,

¹⁷¹ Exhibit 6, CAP Item, at W049.003.

¹⁷² Exhibit 6, CAP Item.

¹⁷³ PG&E Opening Brief, at 52.

¹⁷⁴ See PG&E Opening Brief, at 52.

¹⁷⁵ Exhibit 6, Internal Gas Incident Review, at W048.002.

 $[\]frac{176}{6}$ See D.15-04-021, at 43-46 (citing *Reeves v. MV Transportation* (2010) 186 Cal. App 4th at 681-82).

¹⁷⁷ See PG&E Opening Brief, at 56-62.

¹⁷⁸ PG&E Opening Brief, at 57, fn. 355.

prohibits operating a pipeline in excess of the maximum actual operating pressure. PWA attempted to respond to PG&E's line of questioning by explaining that this section of General Order 112, which limits operation of pipelines, is in fact more restrictive than the cited definition of maximum allowable operating pressure.

Q. Page 7. Looking at Section 805.13 you will see that maximum actual operating pressure. The phrase that is actually used in Section 303.2 is defined as the minimum – I'm sorry. The maximum operating pressure existing in a piping system during a normal annual operating cycle. Do you see that?

Q. There is also a definition under Maximum Allowable Operating Pressure just below that. Do you see that?

A. Yes.

Q. MAOP is the issue under "Discussion" refers to Maximum Allowable Operating Pressure not the maximum actual operating pressure, correct?

A. Yes.

Q. You see they are actually different, right? I saw a nod.

WITNESS GAWRONSKI: A. Yes

WITNESS WOOD: A. Yes.

WITNESS GAWRONSKI: A. Higher operating pressure, generally, than maximum actual. 180

On re-direct, PWA testifies to the lack of import of the transcription error.

WITNESS GAWRONSKI: A. It appears to be a typographical error.

ALJ BUSHEY: Which error is this. For clarity of the record, what exactly are we talking about?

WITNESS GAWRONSKI: The word "actual" was left out.

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¹⁷⁹ Exhibit 15, General Order No. 112 (1961), at E010.058.

¹⁸⁰ RT at 69:12 - 70:16 (Vol. 1).

ALJ BUSHEY: A transcription error, is that a better way to describe it.

WITNESS WOOD: Yes, it would be better.

MR. MOLDAVSKY: Q. Other than that, based on the documents provided and other information reviewed, do you want to change your testimony on that topic in any way?

WITNESS WOOD: A. No. 181

Given the definitions of "actual" and "allowable", a transcription error in this context does not impact the analysis.

B. PG&E Mischaracterizes Mr. Gawronski's Prior Testimony as Well as Regulatory Requirements

PG&E attempts to use Mr. Gawronski's testimony in a 2012 proceeding, out of context, to justify its use of the alternative method. Mr. Gawronski's testimony states:

[I]n order to accommodate operators that may be missing pertinent records, an operator may use a notarized affidavit to determine the historic MAOP. Although this method of determining historic MAOP may be *acceptable at the discretion of regulatory agencies*, using a notarized statement in lieu of pressure charts or inspection reports increases the level of uncertainty associated with gas pipeline operations. ¹⁸³

Mr. Gawronski's qualification regarding regulatory discretion, as used in the prior testimony, limits the value of PG&E's argument on this point.

PG&E also argues that "PHMSA's regulatory guidance does not require operators to obtain 'approval' from their regulator, either formal or otherwise, but rather instructs them to 'consult' with the regulator." Yet, PG&E's interpretation of PHMSA's guidance does not void the Commission's requirement for authorization. Consultation

¹⁸¹ RT at 172:12–26 (Vol. 1).

¹⁸² PG&E Opening Brief, at 59.

¹⁸³ Exhibit 14, J. Gawronski Direct Testimony, Docket No. I.11-02-016, at 8 (emphasis added).

¹⁸⁴ PG&E Opening Brief, at 60.

¹⁸⁵ See General Order 112-C § 105.1.

would inherently be premised on the Commission's requirements. The fact remains that PG&E failed to obtain authorization from the Commission on its alternative method for establishing MAOP.

During the cross-examination of Mr. Singh, he failed to identify a specific state or federal code section that allows the use of PG&E's alternative method:

Q. Can you point to a code section, state or federal, where this post-1970 period is allowed for establishing that?

THE WITNESS: Can you be specific about the regulations? Are you talking about 192.619 Subpart A?

MR. MOLDAVSKY: Q. Anywhere.

A. Subpart C?

Q. I'm not pointing to a particular one. I'm asking can you point to a code section where this post 1970 is allowed?

A. What I had can point to is 1998 guidance issued by the federal regulator, which is PHMSA, that talked about alternate ways of establishing MAOP. 186

PG&E's argument that it should not be sanctioned for its longstanding use of this unauthorized alternative method should be rejected.

XIII. CONCLUSION

In its Opening Brief, PG&E offers the following self-assessment: "PG&E's performance, in contrast, demonstrates that its gas distribution system is safe, and that PG&E continues to reduce risk on its system." PG&E makes this declaration after numerous recordkeeping failures regarding its gas distribution system caused gas releases, outages and a house explosion. Improvement within that context is not difficult. From a regulatory perspective, this Commission should hold PG&E accountable, rather than simply rely on bare assurances. Based on the available evidence, PG&E should be

¹⁸⁶ RT at 500:25 - 501:16 (Vol. 3).

¹⁸⁷ PG&E Opening Brief, at 11.

found in violation of the identified code sections, fined, and ordered to enact the remedial measures described in SED's Opening Brief.

Respectfully Submitted,

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